

What is claimed is:

1. An attachment apparatus for use with a generally vertical radio frequency antenna having a support frame defining an inside and an outside of the antenna, the housing having an upper portion and a lower portion, comprising:
a first anchor housing connected to the upper portion of the support frame;
a second anchor housing connected to the lower portion of the support frame;

a revolving cable having a first section constructed from a first material and a second section constructed from a second material, wherein at least a portion of said cable is disposed within the support frame of the antenna and wherein at least a portion of said cable is disposed outside of said support frame;
and

at least one latching mechanism that activates to prevent said cable from rotation.

2. The apparatus according to claim 1, wherein said first and second anchor housings each comprise shaped channels.

3. The apparatus according to claim 1, wherein said first section of said revolving cable is positioned within the antenna housing during antenna operation and said second section of said revolving cable is positioned on the outside of the antenna housing during antenna operation.

4. The apparatus according to claim 1, wherein said first section of said revolving cable is positioned on the outside of the antenna housing during antenna maintenance and said second section of said revolving cable is positioned within the antenna housing during antenna maintenance.

5. The apparatus according to claim 1, wherein said first material is metal or metal alloy and wherein said second material is a synthetic, low dielectric constant material.

6. The apparatus according to claim 5, wherein said first material is aluminum or stainless steel and said second material is nylon, polypropylene or Kevlar®.

7. The apparatus according to claim 1, wherein said revolving cable is a single, unitary loop.

8. The apparatus according to claim 1, further comprising a second latching mechanism that prevents said revolving cable from rotation, wherein said at least one latching mechanism is disposed within said first anchor housing and said second latching mechanism is disposed with said second anchor housing.

9. The apparatus according to claim 8, wherein said latching mechanisms are each cam actuated arrestors.

10. The apparatus according to claim 1, wherein said first anchor housing comprises a first pulley for rotating said revolving cable and said second anchor housing comprises a second pulley for rotating said revolving cable.

11. The apparatus according to claim 1, further comprises a tension equalization system connected to said attachment apparatus.

12. A radio frequency antenna, comprising:

means for supporting the antenna and defining an inside and an outside of the antenna the supporting means having an upper portion and a lower portion, comprising:

a first anchoring means connected to the upper portion of said supporting means;

a second anchoring means connected to the lower portion of said supporting means;

a revolving cable having a first section constructed from a first material and a second section constructed from a second material, wherein at least a portion of said cable is disposed within said supporting means of the antenna and wherein at least a portion of said cable means is disposed outside of said supporting means;

means for preventing rotation of said revolving cable; and

at least one latching means for preventing said cable from rotating.

13. The apparatus according to claim 12, wherein said first and second anchor means each comprise shaped channels.

14. The apparatus according to claim 13, wherein said first section of said revolving cable means is positioned within the support means during antenna operation and said second section of said revolving cable means is positioned on the outside of the support means during antenna operation.

15. The apparatus according to claim 13, wherein said first section of said revolving cable means is positioned on the outside of the support means during antenna maintenance and said second section of said revolving cable means is positioned within the support means during antenna maintenance.

16. The apparatus according to claim 13, wherein the first material is metal or metal alloy and wherein the second material is a synthetic, low dielectric constant material.

17. The apparatus according to claim 16, wherein the first material is aluminum or stainless steel and the second material is nylon, polypropylene or Kevlar®.

18. The apparatus according to claim 13, wherein said revolving cable is a single, unitary loop.

19. A method for attaching to a vertical radio frequency wave emitting structure having an antenna, wherein the antenna has a support frame defining an inside and an outside of the antenna and an upper portion and a lower portion, the support frame also including a revolving cable that extends between the upper portion and the lower portion, wherein the cable comprises two sections made from two materials, comprising:

- rotating the revolving cable to a first, operational position;
- locking the revolving cable in the first position, preventing the revolving cable from further rotation; and
- attaching an attachment mechanism to the revolving cable.

20. The method according to claims 19, further comprising the steps of:

- detaching the attachment mechanism from the revolving cable; and
- rotating the revolving cable to a second, non-operational position.

21. A radio frequency antenna, comprising:

a support frame that supports the antenna and defines an inside and an outside of the antenna wherein the support frame has an upper portion and a lower portion;

a first anchor connected to the upper portion of said support frame;

a second anchor connected to the lower portion of said support frame;

a revolving cable having a first section constructed from a first material and a second section constructed from a second material, wherein at least a portion of said revolving cable is disposed within said support frame of the antenna and wherein at least a portion of said cable is disposed outside of said support frame of the antenna; and

at least one latching mechanism that prevents said revolving cable from rotating.

22. An attachment apparatus for use with a generally vertical radio frequency antenna having a support frame defining an inside and an outside of the antenna, the housing having an upper portion and a lower portion, comprising:

a first anchor housing connected to the upper portion of the support frame;

a second anchor housing connected to the lower portion of the support frame;

a revolving cable having a first section constructed from a first material and a second section constructed from a second material, wherein said first section of said revolving cable is shielded from RF energy during antenna operation and wherein said second section of said revolving cable is exposed to RF energy during antenna operation; and

at least one latching mechanism that activates to prevent said cable from rotation.

23. A radio frequency antenna, comprising:

a support frame that supports the antenna and defines an inside and an outside of the antenna wherein the support frame has an upper portion and a lower portion;

a first anchor connected to the upper portion of said support frame;

a second anchor connected to the lower portion of said support frame;

a revolving cable having a first section constructed from a first material and a second section constructed from a second material, wherein at least a portion of said revolving cable is exposed to RF radiation during antenna operation and wherein at least a portion of said revolving antenna is shield from RF energy during antenna operation; and

at least one latching mechanism that prevents said revolving cable from rotating.